AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the present application:

1. (Currently Amended) A fixing apparatus comprising:

a ~~rotating heating~~ heating producing element that ~~heat-fixes~~ performs heat-fixing of an unfixed image on a recording medium;

a heating section that is provided with power and that heats the ~~rotating heating~~ heat producing element;

a power supply that receives an instruction from a control circuit located externally of the fixing apparatus and provides the ~~supplies~~ power to the heating section;

a first detecting section that detects a state of the heat producing element;

a power suppressing section that, when the first detecting section detects a state in which a condition for not performing heat-fixing for the heat producing element has been satisfied, suppresses providing the power regardless of a content of the instruction; and

a second detecting section that, when, the second detecting section receives, from the control circuit, the instruction for providing the power, detects that the feeding of the power is suppressed by the instruction and the heating section does not perform or suppresses the heating.

~~a self-diagnosis section that issues a directive for heating when a condition for not heating the rotating heating element has been met, and confirms that the rotating heating element is not heated.~~

2. (Currently Amended) The fixing apparatus according to claim 1, wherein the power supply ~~has~~ comprises:

an inverter circuit that ~~supplies~~ provides power with a high-frequency alternating current to the heating section; and

an oscillation stop circuit that stops oscillation of the inverter circuit when the condition is satisfied. ~~rotating heating element stops or has a rotation speed less than or equal to a threshold value~~.

3. (Currently Amended) The fixing apparatus according to claim 2, further comprising:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a ~~rotation~~ rotational speed of the ~~rotating heating element; and~~ heat producing member ~~a rotation detection section that is provided independently of a processor,~~ and detects, as a state of the heat producing member, from the phase signal, that the ~~rotating heating element~~ heat producing member has stopped rotating or has a ~~rotation~~ rotational speed less than or equal to a threshold value.

4. (Currently Amended) The fixing apparatus according to claim 1, wherein the power supply ~~has~~ comprises:

an inverter circuit that ~~supplies~~ provides power with a high-frequency alternating current to the heating section; and

a processor, wherein:

~~a power-supply-side~~ the processor ~~that~~ controls oscillation of the inverter circuit; [[in]] and

~~accordance with a control signal supplied from a processor, and when the rotating heating element stops or has a rotation speed less than or equal to a threshold value, stops~~

the power suppression section suppresses providing the power regardless of the content of the instruction, by suppressing the oscillation of the inverter circuit regardless of the content of the instruction from the control circuit when the condition is satisfied ~~without regard to the control signal~~.

5. (Currently Amended) The fixing apparatus according to claim 4, wherein:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises ~~further comprising~~ a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a ~~rotation~~ rotational speed of the ~~rotating~~ heat producing member and ~~heating element~~;

~~wherein the power supply side processor~~ detects, as a rotational state of the heat producing member, from the phase ~~signal~~ signal, that the rotating heating element has stopped rotating or has a ~~rotation~~ rotational speed less than or equal to a threshold value.

6. (Canceled).

7. (Currently Amended) The fixing apparatus according to claim 1, wherein: ~~the power supply has~~

the power supply comprises an inverter circuit that ~~supplies~~ provides power with a high-frequency alternating current to the ~~heating section~~ heat producing element; and

the power suppression section comprises a power suppression circuit that controls oscillation of the inverter circuit in accordance with a ~~power~~ control signal supplied from the control circuit ~~processor~~ and ~~when the rotating heating element stops or has a rotation speed less than or equal to a threshold value~~ suppresses oscillation of the inverter circuit regardless of the content of the instruction, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied ~~without regard to the power control signal~~.

8. (Currently Amended) An image forming apparatus comprising:

an image forming section that forms an unfixed image on a recording medium; and

a fixing apparatus that performs heat fixing for ~~heat-fixes by means of a rotating heating element~~ an unfixed image formed on the recording medium [[by]] in the image forming section;

wherein the fixing apparatus comprises: ~~according to claim 1 is used as the fixing apparatus.~~ a heating section that is provided with power and performs heating for a heat producing element that performs heat fixing of the unfixed image;

a power supply that receives an instruction from a control circuit and that provides the power to the heating section;

a first detecting section that detects a state of the heat producing element;

a power suppressing section that, when the first detecting section detects a state in which a condition for not performing heat-fixing for the heat producing element has been satisfied, suppresses the providing of the power regardless of a content of the instruction; and

a second detecting section that, when, the second detecting section receives, from the control circuit, the instruction for providing the power, detects that the feeding of the power is suppressed by the instruction and the heating section does not perform or suppresses the heating.

9. (New) The image forming apparatus according to claim 8, wherein, in the case where the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied, is detected by the first detecting section of the image forming apparatus each time power is turned on and/or is restored from a sleep state, and/or at regular intervals during standby, the image forming apparatus issues an instruction for providing the power to the fixing apparatus, and makes the second detecting section detect that the heating section does not perform or suppresses the heating.

10. (New) The fixing apparatus according to claim 8, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and

an oscillation stop circuit that stops oscillation of the inverter circuit when the condition is satisfied.

11. (New) The fixing apparatus according to claim 10, further comprising:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and detects, as a state of the heat producing member, from the phase signal, that the heat producing member has stopped rotating or has rotational speed less than or equal to a threshold value.

12. (New) The fixing apparatus according to claim 8, wherein the power supply comprises:

an inverter circuit that provides power with a high-frequency alternating current to the heating section; and a processor, wherein:

the processor controls oscillation of the inverter circuit; and

the power suppression section suppresses providing the power regardless of the content of the instruction, by suppressing the oscillation of the inverter circuit regardless of the content of the instruction from the control circuit when the condition is satisfied.

13. (Currently Amended) The fixing apparatus according to claim 12, wherein:

the heat producing element comprises a heat producing member that rotates; and

the first detecting section comprises a signal generation section that detects a rotational state of the heat producing member and outputs a phase signal corresponding to a rotational speed of the heat producing member and detects, as a rotational state of the

heat producing member, from the phase signal, that the rotating heating element has stopped rotating or has a rotational speed less than or equal to a threshold value.

14. (Currently Amended) The fixing apparatus according to claim 8, wherein:

the power supply comprises an inverter circuit that provides power with a high-frequency alternating current to the heat producing element; and

the power suppression section comprises a power suppression circuit that controls oscillation of the inverter circuit in accordance with a control signal supplied from a the control circuit, and suppresses oscillation of the inverter circuit regardless of the content of the instruction, when the first detecting section detects the state in which the condition for not performing heat-fixing for the heat producing element has been satisfied.